

SVIRIDENKO, P.A. (Kiyev)

Comparative estimation of the attractiveness of tree and shrub
seeds with regard to murine rodents. Zool. zhur. 40 no. 5:763-
767 '61. (MIRA 1415)

(Mice) (Animals, Food habits of)
(Forest protection)

L 29956-66
ACC NR: AP6012476

SOURCE CODE: UR/0181/66/008/004/1147/1155
78
B

AUTHOR: Litovchenko, V. G.; Kovbasyuk, V. P.; Sviridenko, P. T.

ORG: Institute of Semiconductors, AN UkrSSR, Kiev (Institut poluprovodnikov AN UkrSSR)

TITLE: Spectra and kinetics of the infrared surface photoconductivity of silicon

SOURCE: Fizika tverdogo tela, v. 8, no. 4, 1966, 1147-1155

TOPIC TAGS: silicon, ir photoconductor, crystal surface, surface property, ir absorption, resonance absorption, impurity center, activation energy

ABSTRACT: The spectra of surface infrared photoconductivity were investigated at room temperature and at 120K using chemically etched surfaces of p- and n-type silicon. The purpose of the investigation was to establish the type of energy distribution of the surface traps, to determine the activation energy of the centers, to estimate their concentration, and to obtain information on the type of photon absorption by the centers (resonant or nonresonant). The spectra were obtained with an IKS-12 spectrometer with slit width 0.05-2 mm. The intensity was varied with the aid of round diaphragms calibrated for each wavelength. The illumination was with an incandescent lamp, square-wave modulated at 9 cps. The samples were in the form of thin plates (20 x 6 x 0.6 mm). The impurity concentration was kept low to ensure that the influence of the surface centers on the impurity photoconductivity will dominate. The obtained spectra exhibited at low wavelengths ($> 2.5 \mu$) a nonmonotonic variation with several maxima, a set of clearly pronounced "ledges" at medium wavelength, and a

Card 1/2

SVIRIDENKO, R.N., inzh.; LEV, N.S., inzhener-ekonomist

I.I.Pudnik's brigade sets the example for work. Transp. stroi.
(MIRA 16:9)
13 no.6:44-45 Je '62.

1. Mostostroy No.5 (for Sviridenko). 2. Mostopoyezd No.410 (for
Lev).
(Concrete construction—Formwork)

SVIRIDENKO, S. Kh.
PAVLOVSKIY, S.P., inzh.; BARAB-TARLE, M.Ye., inzh.; SVIRIDENKO, S.Kh., inzh.

The DB-6601 automatic jointing and surfacing machine with magazine
feed. Der. prom. 7 no.1:3-4 Ja '58. (MIRA 11:1)
(Jointer (Woodworking machine))

BRODSKIY, L.Sh.; BARAB-TARLE, M.Ye.; SVIRIDENKO, S.Kh.

Automatic four-spindle grooving machines. Der.prom. 7 no. 6:10-11
(MIRA 11:8)
Je '58.
(Woodworking machinery)

AKHMECHET, L.S.; BLOKH, O.I.; MATSIYEVSKIY, A.G.; NESTEROV, Ye.N.; SVIRIDENKO,
S.Kh.

Selecting parameters for vibration bin feeds. Stan. i instr. 30 no.2:
8-9 F '59. (MIRA 12:3)
(Machine tools--Attachments)

VLADZIYEVSKIY, A.P., doktor tekhn. nauk; ZOTOV, V.K.; ZUZANOV, G.I.; PEREPELI-TSEY, P.G.; SVIRIDENKO, S.Kh.; SHCHEGOL'KOVA, L.I.; BORUSHMOY, I.V., red.; KOGAN, F.L., tekhn. red.

[Machine-tool industry in Italy; survey] Stankostroenie Italii; obzor. Moskva, Tsentr. in-t nauchno-tekhn. informatsii mashinostroeniia, 1961. 172 p. (MIRA 14:9)

(Italy—Machine-tool industry)

SVIRIDENKO, Sergey Kharitonovich; BARAB-TARLE, Matus' Yelevich;
MIZHEVSKIY, Lev Leonidovich; RASHKOVICH, Mikhail Pavlovich;
SRIBNER, Leonid Andreyevich; SHRAGO, Leonid Konstantinovich;
ORLIKOV, M.L., kand. tekhn. nauk, retsenzents; ROMANOV, A.I.,
inzh., red.; BYKOVSKIY, A.I., inzh., red.; GORNOSTAYPOL'SKAYA,
M.S., tekhn. red.

[Program control of jig drilling machines] Programnoe upravlenie
koordinatno-sverlil'snymi stankami. Moskva, Mashgiz, 1962.
87 p.

(Drilling and boring machinery--Numerical control)

MATSIYEVSKIY, Anatoliy Gavrilovich; ERLIKH, Lazar' Borisovich; Prinimali
uchastiye: SLEZINGER, I.N., kand.tekhn.nauk, dots.; MENAKER, L.S.,
inzh.; RABINOVICH, I.Sh., inzh.; SVIRIDENKO, S.Kh., red.; ORLIKOV,
M.L., dots., retsenzent; BYKOVSKIY, A.I., inzh., red.;
GORNOSTAYPOL'SKAYA, M.S., tekhn. red.

[Efficient organization of machine-tool design] Ratsionalizatsiya
raschetov pri konstruirovani stankov. Pod red. S.Kh.Sviridenko.
Moskva, Mashgiz, 1962. 127 p. (MIRA 15:7)
(Machine tools--Design)

SVIRIDENKO, S.Kh.; AKHMECHET, L.S.; VOLKOV, A.A.; MEYSTEL', A.M.;
MIZHEVSKIY, L.L.; POLYAKOV, L.M.; RASHKOVICH, M.P.;
SRIHNER, L.A.; KHVALOV, Yu.G.; SHPIGLER, L.A.; SHRAGO,
L.K.; ORLIKOV, M.L., inzh., retsenzent; SVECHNIKOV, L.V.,
inzh., retsenzent; MATSIYEVSKIY, A.G., inzh., red.

[Elements of the automation of machine tools] Elementy
avtomatizatsii metallorezhushchikh stankov. Moskva, Mash-
giz, 1964. 210 p. (MIRA 17:12)

GUREVICH, S.G.; IL'YASHENKO, G.A.; SVIRIDENKO, S.Kh.; ERLIKH,
L.B., prof., retsenzent; FRID, L.I., inzh., red.

[Machinery for the processing of thermoplastic materials]
Mashiny dlja pererabotki termoplasticheskikh materialov.
Moskva, Mashinostroenie, 1965. 326 p. (MIRA 18:10)

L 7030-66 EWT(h)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(1)/EWA(c) JD/HW
ACC NR: AP5026826 SOURCE CODE: UR/0286/65/000/017/0110/0110

AUTHOR: Kashkadamov, V. P.; Krichever, S. S.; Lebenson, M. Ye.; Makarov, A. A.;
Sviridenko, S. Kh.; Fal'ba, N. I.

ORG: none

TITLE: A copy-miller for machining turbine vanes. Class 49, No. 174498

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 110

TOPIC TAGS: milling machine, turbine blade

ABSTRACT: This Author's Certificate introduces a copy-miller for machining turbine vanes. The milling heads are mounted on both sides of the workpiece and move in the transverse direction with respect to the table which carries the workpiece. The forces which twist the vane during machining are reduced by equipping the miller with a hydraulic servosystem which has pickups based on slide valves. The valves direct the stream of working fluid to the activating mechanism which rotates the pieces being machined and the master copy in such a way that the surface of the master copy in contact with the feelers will be normal to the line passing through the centers of curvature of the feelers for the copy pickups. The surface of the part being machined is turned so that it is normal to the line connecting the centers of the milling cutters.

UDC: 621.914.37-503.53
621-253.5

Card 1/2

I 7030-66

ACC NR: AP5026826

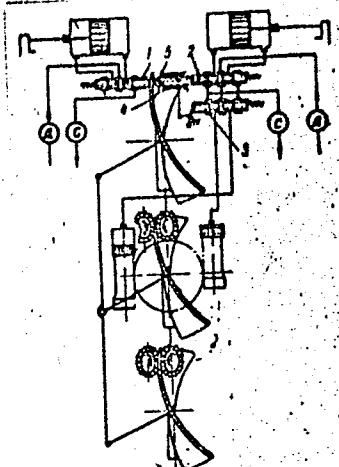


Fig. 1. 1-3--valves; 4 and 5--feeler rods

SUB CODE: IE/

SUBM DATE: 07May62/

ORIG REF: 000/

OTH REF: 000

BC
Card 2/2

L 17274-63 BDS
ACCESSION NR: AP3004368

S/0109/63/008/008/1344/1354

418

AUTHOR: Sviridenko, S. S.

TITLE: Phase variation at the onset of self-oscillations in an electron tube oscillator subjected to a weak external force

SOURCE: Radiotekhnika i elektronika, v. 8, no. 8, 1963, 1344-1354

TOPIC TAGS: self-oscillation , electron tube oscillator, radar

ABSTRACT: In generating short pulses in response to weak external signals (radar case), it is important to know phase-transient time and the difference between the external signal phase and the oscillator phase by a specified moment of time. The phase transient process is characterized by a transient function of phase distribution which is found as a result of solving simplified and truncated first-approximation equations of amplitude and phase. With a proper allowance for fluctuations in the pre-oscillation period, mathematical expressions are

Card 1/2

L 17274-63

ACCESSION NR: AP3004368

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obtained for the transient distribution of phase probability density, the integral phase-distribution law, the transient phase dispersion, and the duration of phase transient. "In conclusion, it is my pleasant duty to thank Yu. B. Kobzarev for his attention to this work, and also F. L. Fridlender and G. N. Myazina for their help with the calculations." Orig. art. has: 8 figures and 28 formulas.

ASSOCIATION: none

SUBMITTED: 23Jun62

DATE ACQ: 20Aug63

ENCL: 00

SUB CODE: GE, RA

NO REF SOV: 005

OTHER: 002

Card 2/2

ACCESSION NR: AP4024727

S/0109/64/009/003/0449/0458

AUTHOR: Sviridenko, S. S.

TITLE: Theory of dynamic processes that establish the oscillation phase in a nonautonomous parametric oscillator

SOURCE: Radiotekhnika i elektronika, v. 9, no. 3, 1964, 449-458

TOPIC TAGS: oscillator, parametric oscillator, parametric oscillations, parametric oscillation phase

ABSTRACT: The transients in a single-circuit parametric oscillator are investigated by a method of mathematical statistics. With no periodic variation of the reactive parameter, the oscillator circuit is excited by a regular signal and a fluctuating noise, whose superposition determines the initial amplitude A_0 and phase φ_0 of the oscillations. Upon application of a pumping voltage, the circuit is excited by the regular signal only (no noise). The nonstationary function of the

Card 1/3

ACCESSION NR: AP4024727

phase probability density is found to be:

$$w(\varphi, \tau) = \frac{1}{N_1} \left\{ \frac{1}{2\pi} + \frac{s}{2\sqrt{2\pi}} \cos [\theta^{-1}(\tau + z) - \varphi_0] \right\} \times \\ \times \exp [m \cos 2\varphi + s \cos (\varphi_0 - \varphi)] \frac{\tau}{2} \quad (20)$$

for a
weak signal $s \ll 1$ and

$$w(\varphi, \tau) = \frac{1}{N_1} \frac{s}{\sqrt{2\pi}} \cos [\theta^{-1}(\tau + z) - \varphi_0] \times \\ \times \exp \left\{ \frac{1}{2} [m \cos 2\varphi + s \cos (\varphi_0 - \varphi)] \tau - \frac{s^2}{2} \sin^2 [\theta^{-1}(\tau + z) - \varphi_0] \right\} \quad (21)$$

for a
strong signal $s \gg 1$.

Formulas for the normalizing factors are also given. Two particular cases are analyzed: (1) the signal phase coincides with one of the stable phases of the oscillator and (2) it differs from the latter by $\pi/2$. Orig. art. has: 4 figures

Card 2/3

ACCESSION NR: AP4024727

and 47 formulas.

ASSOCIATION: none

SUBMITTED: 06Feb63

DATE ACQ: 10Apr64

ENCL: 00

SUB CODE: EC

NO REF SOV: 009

OTHER: 000

Card 3/3

L 63711-65 EWT(1)/EEC(b)-2/EWA(h)
ACCESSION NR: AP501405

UR/0108/65/020/005/0020/0024
621.373

10
B

AUTHOR: Sviridenko, S. S. (Active member)

TITLE: Probability of phase jump in a parametric oscillator excited by both a regular signal and a fluctuation ⁷⁵

SOURCE: Radiotekhnika, v. 20, no. 5, 1965, 20-24

TOPIC TAGS: parametric oscillator

ABSTRACT: The excitation of oscillations is statistically investigated in a parametric oscillator whose phase is close to the phase of the incoming signal distorted by fluctuations. The process of phase establishment, in the oscillator, is considered with special emphasis on the possible phase jump from one pull-in region into another at the moment when the phase is near-stationary. The external excitation of the oscillator consists of a sum of a harmonic signal and fluctuations whose mean square deviation is commensurate with the signal

Card 1/2

L 63711-65

ACCESSION NR: AP5014051

amplitude. As the result of an approximate numerical (on computer) solution of a Fokker-Planck equation for steady-state conditions, statistical characteristics of phase depending on the detuning and the signal-to-noise ratio are obtained. These characteristics either permit the correct selection of the phasing-signal amplitude for a specified error probability, or permit an estimation of possible error in the operation of the parametric oscillator as a trigger when the phasing signals are weak and the fluctuations are strong. Orig. art. has: 4 figures and 10 formulas.

ASSOCIATION: Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi
(Scientific and Technical Society of Radio Engineering and Electrocommunication)

SUBMITTED: 06 Feb 63

ENCL: 00

SUB CODE: EC

NO REF SOV: 007

OTHER: 000

rrr
Card 272

SVIRIDENKO, V.A. [Svyrydenko, A.A.]

Effect of feeding and the physiological condition on carbohydrate and fat metabolism in cattle. Ukr.biokhim.zhur. 32 no.3:427-442 '60. (MIRA 13:6)

1. Research Institute of Animal Husbandry of the Forest-steppe and Forest Zones of the Ukrainian S.S.R., Kiyev.
(CATTLE--PHYSIOLOGY) (CARBOHYDRATE METABOLISM)
(FAT METABOLISM)

KAPLAN, V. A. (Docent) and SVIRIDENKO, V. A. (Candidate of Biological Sciences, Scientific Research Institute of Animal Husbandry in the Forest Steppe and Polesie of the Ukrainian SSR).

"Alkaline reserve and the content of volatile fatty acids and acetone bodies in the blood of cattle..."
Veterinariya, vol. 39, no. 2, February 1962 pp. 51

SVIRIDENKO, V.A. Cand Bio Sci — (diss) "Study of the indices
of carbohydrate-fat metabolism in the blood of cattle in connection
with the nourishment and physiological condition of the animals,"
Kharkov, 1960, 18 pp, 150 cop. (Kharkov State U im A. M. Gorkiy)
(KL, 45-60, 124)

NAZARENKO, M.F.; SVIRIDENKO, V.A.

Mineralizing effect of certain admixtures upon the mullite process.
Vest. AN Kazakh. SSR 10 no.11:85-89 N '53. (MLRA 6:12)

1. Predstavlena deystvititel'nym chlenom Akademii nauk Kazakhskoy
SSR D.V.Sokol'skim.

(Mullite)

NAZARENKO, M.F.: SVIRIDENKO, V.A.

Brick products from monothermite clays of central Kazakhstan.
Izv. AN Kazakh. SSR Ser.gor.dela, met. i stroimat. no.2:13-17
1954. (MIRA 9:6)
(Kazakhstan--Monothermite) (Ceramic industries)

NAZARENKO, M.F.; SVIRIDENKO, V.A.; SOLOMIN, A.V.

Use of the PMT-3 microdurometer to determine the caking ability
of ceramic bodies. Inv.AN Kazakh. SSR Ser.gor.dela, met. i stroimat.
no.2:30-33 !54. (MIRA 9:6)
(Ceramic materials--Testing) (Hardness)

USSR/Miscellaneous - Chinaware

Card 1/1 Pub. 123 - 12/15

Authors : Nazarenko, M. F. and Sviridenko, V. A.

Title : Raw materials of the Akmolinsk chinaware factory

Periodical : Vest. AN Kaz. SSR 11/10, 105-111, Oct 1954

Abstract : Raw materials used at the Akmolinsk chinaware factory were analyzed and the results show that the raw materials satisfy the required specifications. One USSR reference (1954). Tables.

Institution :

Submitted :

SVIRIDENKO, V. A.

MT ✓ The effect of valence and radius of the cation of mineralizers on the process of mullitzation. A. I. Avgustinik,
M. E. Nazarenko, and V. A. Sviridenko. *J. Appl. Chem.*
U.S.S.R. 27, 733-5 (1954) (Eng. translation). See *C.A.*
49, 6814. B. M. R.

(2)

SVIRIDENKO, V. A.

The effect of valence and radius of the cation of mineralizers on the process of mullitization. A. I. Avgustink, M. P. Nazarenko, and V. A. Sviridenko. Zhur. Priklad. Kemi, 27, 782 (1954); *ibid.*, *et al.*, C.A., 41, 6379b. — The amount of mullite formed at 1400° for 4 hrs. from mixts. of $\text{Al}_2\text{O}_3 + \text{SiO}_2$ (mol. ratio 3:2) in the presence of different mineralizers (1 mol. %) was detd. microscopically. For the same valence the effectiveness increased as the radius of the cation decreased and for the same radius it was greater for lower-valence cations. Mineralization was 100% complete in the presence of Li^+ , Mg^{++} , 90% complete with Ca^{++} , and 66% with Mn^{++} ; whereas it was only 92, 68, 95, 88, 82, and 90% complete in the presence of Na^+ , K^+ , Ca^{++} , Ba^{++} , H^{++} , and Ti^{4+} , resp. Exceptions to the rule were Zn^{++} (80% complete) and Cr^{++} (75%). The 1st should be between Mg^{++} and Ca^{++} and the last near Fe^{++} . I.B.

SVIRIDENKO, V. A.

Effects of additives on the stability of molten
Yamarenko and V. A. Sviridenko, February 21, 211-17
(1958). The article

3

4120

Stal' - Metallovedenie i Termicheskaya obrabotka metallov

W. T. G.

most buildings - Bubble Material PM
the market

SVIRIDENKO, V.A.

Effect of mineralizers on the process of molding tiles. Trudy Inst.
stroi. i stroimat. AN Kazakh SSR 1:80-90 '58. (MIRA 11:6)
(Tiles) (Porcelain)

NAZARENKO, M.F.; SVIRIDENKO, V.A.

Water method of enriching feldspars. Vest. AN Kazakh. SSR
14 no.11:51-58 N '58.
(Building materials) (Feldspar)

(MIRA 11:12)

ACCESSION NR: AT4010700

S/2601/63/000/017/0209/0210

AUTHOR: Kocherzhinskly, Yu. A.; Kobzenko, G. F.; Pan, V. M.; Sviridenko, V. K.;
Yupko, L. M.TITLE: Calibration of the VR-5/20 thermocouple according to critical points up to
3000°C. Determination of the melting points of vanadium and niobium of high puritySOURCE: AN UkrRSR. Instytut metalofizyky. Sbornik nauchnykh trudov, no. 17,
1963. Voprosy fiziki metallov i metallovedeniya, 209-210TOPIC TAGS: thermocouple, VR-5/20 thermocouple, thermocouple calibration,
vanadium, niobium, vanadium melting point, niobium melting point, tungsten rhenium
alloyABSTRACT: After calibration studies using the melting points of silver, gold,
iron, nickel, palladium, platinum, chromium, molybdenum, and tantalum had shown
that the VR-5/20 thermocouple (consisting of electrodes made of tungsten alloys
containing 5 and 20% rhenium, respectively) could be used for the accurate de-
termination of temperatures up to 3000°C, the authors applied the technique of
V. S. Mikheyev to the determination of the melting points of vanadium (1950°C)
and niobium (2520°C). "In conclusion, the authors would like to thank A. M.
Gurevich and Ye. I. Pavlova for making the thermocouple available." Orig. art.

Card 1/2

ACCESSION NR: AT4010700

has: 1 figure and 1 table.

ASSOCIATION: Insty*tut metalofizy*ky* AN UkrRSR (Metallophysics Institute, AN UkrRSR)

SUBMITTED: 00

DATE ACQ: 31Jan64

ENCL: 00

SUB CODE: ML

NO REF Sov: 003

OTHER: 001

Card 2/2

SVIRIDENKO, Vadim Mikhaylovich[Svyrydenko, V.M.]; DISHLEVYY, P.S.
[Dishlevyj, P.S.], kand. fil. nauk, etv. red.; RAKHLINA, N.P.,
tekhn. red.

[Role of mathematical hypotheses in the interpretation of
microphysical phenomena; materials showing the development of
nonrelativistic quantum mechanics] Rol' matematicheskoi hipotezy v
piznani mikroavashch; na materialakh rozv'ytku nereliatyvi-
sts'koi kvantovoi mekhaniky. Kyiv, Vydvo AN URSR, 1962. 171 p.
(MIRA 16:3)

(Quantum theory) (Nuclear physics)

SVIRIDENKO, V.T.; KADENSKIY, A.A., prof., nauchnyy rukovoditel' raboty

Geomorphological structure of the central part of the Udekan
Range. Uch. zap. Ped. inst. Gerts. 239:177-182 '64.

(MIRA 18:3)

SVIRIDENKO, V.T.

History of the development of igneous activity in the central part of the Kodar-Udokan zone (northeastern Transbaikalia).
Uch. zap. Fed. inst. Gerts. 267:163-183 '64.

Age relations of intrusive complexes to the sedimentary-metamorphic formation in the Kodar-Udokan zone (northeastern Transbaikalia). Ibid. 268:185-191
(MIRA 38:2)

SVIRIDENKO, V.V.; KRYSHTALEVA, M.S., glavnny metodist; YEFREMOV, Yu.K.,
otvetstvennyy redaktor; YEFIMOV, A.L., redaktor; BALLOD, A.L.,
tekhnicheskiy redaktor

["Northern Caucasus" pavilion; a guidebook] Pavil'on "Severnyi
Kavkaz"; putevoditel'. Moskva, Gos. izd-vo selkhoz. lit-ry,
1956. 31 p. (MLRA 9:9)

1. Moscow. Vsesoyuznaya sel'skokhozyaystvennaya vystavka, 1954-
2. Direktor pavil'ona (for Sviridenko)
(Caucasus, Northern--Agriculture)
(Moscow--Agricultural exhibitions)

SVIRIDENKO V.V.
SVIRIDENKO, V.V., agronom.

Thirty-one thousand feed units to the hectare. Nauka i pered. op.
(MIRA 11:1)
v sel'khoz. 7 no. 12:11-13 D '57.
(Corn (Maize))

SVIRIDENKO, V.V.; KRYSHTALEVA, M.S.; SKOBKIN, S.G., otv.red.; FEL'DMAN,
Ye.V., red.; MATVEYEV, A.P., tekhn.red.

[Northern Caucasus] Severnyi Kavkaz. Moskva, Izd-vo "Sovetskaia
Rossiia," 1958. 70 p. (MIRA 12:12)

1. Rabotniki pavil'ona "Severnyy Kavkaz" na Vsesoyuznoy sel'sko-
khozyaystvennoy vystavke (for Sviridenko, Kryshaleva).
(Caucasus, Northern--Agriculture)

SVIRIDENKO, V.V.; KRYSHTALEVA, Margarita Sergeyevna; SKOBKIN, S.G., red.

[Practices of participants in the All-Union Agricultural Exhibition:
the Northern Caucasus] Opyt uchastnikov VSKHV: Severnyi Kavkaz.
Moskva, "Sovetskaya Rossiia". 1958. 70 p.

(MIRA 13:6)

(Caucasus, Northern--Agriculture)
(Moscow--Agricultural exhibitions)

SVIRIDENKO, V.

Queen of fields at the exhibition. Nauka i perekop. sel'-
khoz. 9 no.8:31-34 Ag '59. (MIRA 12:12)

1. Glavnnyy metodist pavil'ona "Kukuruza," Vystavka dostizheniy
narodnogo khozyaystva SSSR.
(Corn(Maize)--Exhibitions)
(Moscow--Agricultural exhibitions)

SVIRIDENKO, V. V.

Experience of the most efficient machinery operators in corn
growing. Zemledelie 8 no.12:72-73 D '60. (MIRA 13:11)

1. Glavnnyy metodist pavil'ona "Kukuruza" Vystavki dostizheniy
narodnogo khozyaystva SSSR.
(Corn (Maize))

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001654130007-4

SVIRIDENKO, V.V.; VOLOKHOV, A.V.

Display of corn at the Exhibition of Achievements of the
National Economy of the U.S.S.R. Zhivotnovodstvo 23 no.3:
40-44 Mr '61. (MIRA 17:1)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001654130007-4"

KARNISHIN, Aleksey Vasil'yevich, inzh.; SVIRIDENKO, V.V., nauchn.
red.

[Sprinkler irrigation units] Dozhdedval'no-ocsitel'nye
agregaty. Moskva, TSentr. nauchno-issl. inst patentnoi
informatsii i tekhnicheskogo issl., 1964. 27 p.
(MIRA 18:8)

AUTHORS: Krasin, A. K., Minashin, M. Ye., Sviridenko, V. Ya. SOV/89-5-2-2/36

TITLE: The Influence of the Temperature of a Neutron Gas on the Duration of the Runs of the Fuel and Its Regeneration in a Power Reactor (Vliyaniye temperatury neytronnogo gaza na prodolzhitel'nost' kampanii i vosproizvodstvo goryuchego v energeticheskem reaktore)

PERIODICAL: Atomnaya energiya, 1958, Vol. 5, Nr 2, pp. 111-118 (USSR)

ABSTRACT: The calculation of the influence exercised by the temperature of the neutron gas on the duration of the run of the reactor, on the production of Pu²³⁹, and on the amount of the electric energy generated is dealt with. Calculations relate especially to the following two variants of reactors:

	Variant I	Variant II
a) Heat output of the reactor	140 MW	140 MW
b) Quantity of uranium	24,5 t	24,5 t
c) Initial enrichment of uranium	1%	1,5%
d) Material of tubes for coolant	Zr of a thickness of 0,5 mm	steel of a thickness of 0,2 mm

Card 1/4

The Influence of the Temperature of a Neutron Gas on the Duration of the Runs of the Fuel and Its Regeneration in a Power Reactor

SOV/89-5-2-2/36

		Variant I	Variant II
e)	Canning material of fuel elements	Zr of a thickness of 0,3 mm	steel of a thickness of 0,2 mm
f)	Moderator material in core and reflector	graphite (1,67 g/cm ³)	graphite (1,67 g/cm ³)
g)	Coolant	Na	Na
h)	Diameter of core	500 cm	500 cm
i)	Height of core	400 cm	400 cm
j)	Thickness of lateral and basic reflectors	80 cm	80 cm
k)	Number of cells	400	400
Card 2/4	l) Number of channels for regulating-and safety rods	50	50

The Influence of the Temperature of a Neutron
Gas on the Duration of the Runs of the Fuel and
Its Regeneration in a Power Reactor

SOV/89-5-2-2/36

- f) Diameter of core: 8 m
g) Height of core: 6 m
2.) Heterogeneous Uranium-Graphite Reactor:
a) Heat output: 500 MW
b) Total weight of uranium: 132 t
c) Initial enrichment of uranium: 1%
d) Type of fuel elements: cylindrical slugs of 3 cm diameter
e) Canning material: stainless steel of 0,3 mm thickness
f) Coolant: CO₂
g) Diameter of core: 8 m
h) Height of core: 8 m
i) Step of lattice: 20 cm

There are 14 figures, 1 table, and 2 references, 2 of which are Soviet.

SUBMITTED: May 9, 1958

Card 4/4

L 64736-65 EWT(m)/EPF(c)/EPF(n)-2/ENG(s) MM/DM

ACCESSION NR: AP5019803

UR/0089/65/019/001/0014/0019 39
621.039.520.22

AUTHOR: Vladykov, G. M.; Dubovskiy, B. I.; Kamayev, A. V.; Sviridenko, V. Ya.;
Kuznetsov, F. M.; Popov, G. A.; Pidamorenskaya, N.

TITLE: Efficiency of heterogeneous absorbers in homogeneous uranium-water reactors.

SOURCE: Atomnaya energiya, v. 19, no. 1, 1965, 14-19

TOPIC TAGS: water moderated reactor, homogeneous nuclear reactor, neutron flux,
neutron absorber, reactor control, nuclear reactor core

ABSTRACT: The authors investigated the effect of various absorbers on the value of the critical mass of homogeneous uranium-water reactors. The experiments were made both with reactors having no reflectors and with reactors provided with bottom or side water reflectors up to 25 cm thick. The core was an aqueous solution of $\text{UO}_2(\text{NO}_3)_2$ in cylindrical steel tanks with walls made of 1.5 mm stainless steel. The absorbing rods were made of powdered boron carbides clad in stainless steel, or else of water-filled cadmium tubing also clad in stainless steel. The efficiency of the absorbing rod is defined as the change in the critical volume or critical height of the reactor assembly with and without the absorber. The efficiency of an isolated rod or of a group of rods was measured as

Card 1/2

L 64736-65

ACCESSION NR: AP5019803

as a function of the absorber dimension and of the uranium concentration in the core. The results are presented in the form of a set of plots and tables, in which the experimental data are compared with the values calculated by the two-group theory. The difference between the results is on the order of 10%. Increasing the number of rods in the group increases the critical volume and thus contributes to the safety of the reactor. The use of steel cladding for the absorber rods contributes to the rod efficiency. Orig. art. has: 8 figures, 4 formulas, and 2 tables.

[02]

ASSOCIATION: none

SUBMITTED: 20Jul64

ENCL: 00

SUB CODE: NP

NO REF Sov: 005

OTHER: 000

ATD PRESS: 4078

llc
Card 2/2

ACC NRI: AN6032824

(A)

Monograph

DR/

Dubovskiy, B. G.; Kamayev, A. V.; Kuznetsov, F. M.; Vladykov, G. M.; Gurin, V. N.; Murashov, A. P.; Markelov, I. P.; Kochergin, V. P.; Vaymugin, A. A.; Sviridenko, V. Ya.; Dlyev, L.V.; Bogatyrev, V.K.; Vavilov, V. V.; Frolov, V. V.

Critical parameters of systems with fissionable materials and nuclear safety; a handbook (Kriticheskiye parametry sistem s delyashchimisa veshchestvami i yadernaya bezopasnost'; spravochnik) Moscow. Atomizdat. 1966. 225 p. biblio., diagrs., tables. 9000 copies printed.

TOPIC TAGS: nuclear safety, nuclear reactor, homogeneous nuclear reactor, heterogeneous nuclear reactor, chain reaction

PURPOSE AND COVERAGE: This handbook is intended for specialists concerned with the problems of assuring nuclear safety as well as for persons calculating, designing, operating, and studying the physics of nuclear reactors of various types, as well as for students in associated departments. The book discusses methods of creating and maintaining conditions which will exclude the possibility of an accidentally chain reaction during the processing, storage, and transportation of fissionable materials. The book is based mainly on the results of studies published before 1965. In addition to information on critical parameters of systems with fissionable materials, the authors considered it useful to include in the handbook the fundamental concepts of criticality, principles for assuring nuclear safety, a review of cases of the occurrence of uncontrolled chain reactions,

Card 1/2

UDC: 621.039.519.4/621.039.58

ACC NR: AM6032824

and the basic standards for nuclear safety. The authors express appreciation to M. P. Rodionov, T. I. Sukhoverkhova, M. A. Gavrilova, and L. V. Antonkina for their valuable assistance. There are 64 references, 30 of which are Soviet.

TABLE OF CONTENTS (Abridged)

From the authors -- 3

- Ch. I. Basic concepts of nuclear safety -- 5
- Ch. II. Review of experimental data on critical parameters of systems with fissionable materials -- 14
- Ch. III. Methods of calculating homogeneous reactors -- 88
- Ch. IV. Effect of neutron absorbers on the criticality of systems with fissionable materials -- 142
- Ch. V. Criticality of systems of interacting subcritical assemblies from fissionable materials -- 169
- Ch. VI. Uncontrolled chain reaction outbursts in systems containing fissionable materials -- 202
- Ch. VII. Basic standards for assuring nuclear safety -- 214

References -- 223

SUB CODE: 18/ SUBM DATE: 20May66/ ORIG REF: 030/ OTH REF: 034

Card 2/2

SVIRIDENKO, Ye.T.; ALIYEVA, R.O.; LIKHWARⁱ, N.A., direktor.

Serological diagnosis of diphtheria; author's abstract. Zhur.mikrobiol.
epid.i immun. no.4:29 Ap '53. (MLR. 6:6)

1. Dagestanskiy institut epidemiologii i mikrobiologii. (Diphtheria)
(Serum diagnosis)

SVIRIDENKO, Ye. T.

ALIYEVA, R.S.; PIVOVAROVA, G.M.; SVIRIDENKO, Ye.T.; SADOVSKAYA, T.M.

Effectiveness of antidiphtheric vaccination of infants following
Schick's test. Pediatrilia, Moskva no.6:62-65 Nov-Dec 1953. (CIML 25:5)

1. Of Dagestan Scientific=Research Institute for the Production of
Nutritive Media (Director --- Candidate Biological Sciences N. A. Likhvar')
of the Ministry of Public Health USSR.

SVIRIDENKO, Ye.T.; ALIYEVA, R.O.

Serological characteristics of *Corynebacterium diphtheriae* and their
relation to clinical and epidemiological aspects of diphtheria;
author's abstract. Zhur.mikrobiol.epid.i immun. no.3:37 Mr '54.
(MLRA 7:4)

1. Iz laboratorii kapel'nykh infektsiy Dagestanskogo instituta
vaktsin i syvorotok (direktor N.A.Likhvar').
(Diphtheria--Bacteriology)

S'VIRIDENKO, Ye. T.

USSR/Microbiology. Microbes Pathogenic for Man and
Animals

F

Abs Jour : Ref Zhur-Biol., No 13, 1958, 57748

Author : Sviridenko Ye. T.

Inst : Not given

Title : Toxin Formation in Diphtheria Microbes PW8
in Bullions from Fish Autolysates (Preliminary
Report)

Orig Pub : Materialy po obmenu opytom, G. upr. in-tov vakt-
sin i syvorotok M-va zdravookhr., SSSR, 1956,
2/52, 13-18

Abstract : A diphtheria toxin of high concentration was
obtained in the cultivation of microbes in a
bullion prepared from autolysates of the inter-
nal organs of herring and Atherenidae. In both
cases the toxin formation was not constant and

Card 1/2

Sviridenko E.T.

USSR/Microbiology - Microorganisms Pathogenic to
Humans and Animals.

F-5

Abs Jour : Ref Zhur - Biol., No 4, 1958, 14834

Author : Sviridenko, E.T.

Inst :

Title : Search for New Nutrient Media for Obtaining Diphtheria
Toxin. Communication 2. Study of Immunogenic Properties
of Diphtheria Toxoids Obtained in Fish Waste Broth.

Orig Pub : Materialy po obmenu opyтом. Gl. upr. in-tov vaktsin i
syvorotok M-va zdravookhr. SSSR, 1956, 2-52, 35-39

Abstract : Part I-- see Ref Zhur Biol., 1957, 96906
No abstract.

Card 1/1

Sviridenko, E.T.

USSR/Microbiology - Microorganisms Pathogenic to
Humans and Animals.

F-5

Abs Jour : Ref Zhur - Biol., No 4, 1958, 14846

Author : Sviridenko, E.T.

Inst :

Title : Study of Immunogenic Properties in Diphtheria Toxoids
Obtained in Fish Waste Broth.

Orig Pub : Uch. zap. Dagestansk. n.-i. in-ta po proiz-vu pitateln.
sred, 1956, No 2, 63-68

Abstract : Diphtheria bacteria PW8 were cultivated on broth prepared
from deep catch sprats (I), aterinka (II) or herring was-
tes (III). In broth from I toxin was formed with a titer
of 68 AE (toxoid units) per ml; in broth from II, the
toxin titer reached 60 AE per ml, and from III--50 AE per
ml. Toxoids prepared from these toxins were found to be
entirely harmless in 5 ml hypodermic injections into guil-
nea pigs and were satisfactorily stable when stored at

Card 1/2

SVIRIDENKO, E.T.

F-5

USSR/Microbiology - Microorganisms Pathogenic to
Humans and Animals.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 14849

Author : Sviridenko, E.T.

Inst :
Title : Diphtheria Bacilli in Skin Diseases.

Orig Pub : Uch. zap. Dagestansk. n.-i. in-ta po proiz-vu pitateln.
sred, 1956, No 2, 125-132.

Abstract : A study was conducted on properties of 311 strains isolated from diseased skins of 216 patients and 67 strains found in mucus of the pharynx and nose of 46 of the same patients, as well as 200 strains isolated from patients with diphtheria of the upper respiratory passages. Corynebacteria isolated from diseased skin had morphological, cultural, biochemical, biological, and serological properties typical of diphtheria bacteria and comprised 3 types: gravis 16.07%, mitis 67.2%, intermedius 16.4%. In diphtheria of

Card 1/3

USSR/Microbiology - Microorganisms Pathogenic to
Humans and Animals.

F-5

Abs Jour : Ref Zhur - Biol., No 4, 1958, 14849

skin were virulent. Injection of antidiphtheria serum into patients speeded the healing and clearing of skin diseases. In the blood serum of patients, even in the initial days of the disease, agglutinins were determined in titers of 1:100-1:1600 (most frequently 1:200), which disappeared only on total recovery. The author believes that corynebacteria vegetating in the diseased skin are in reality diphtheria organisms and determine a specific pathological process. Among patients with different skin diseases, diphtherial skin diseases comprised 25-35.9%-- and of these, children up to the age of 4 constituted 58.3%. The author points out that a patient ill with skin diphtheria may be the source of disease to other persons (diphtheria of skin or respiratory passages).

Card 3/3

SVIRIDENKO, Ya.T.

Epidemiology of cutaneous diphtheria. Pediatriia 39 no.4:36-38
(MLRA 9:12)
Jl-Ag '56.

1. Iz Dagestanskogo nauchno-issledovatel'skogo instituta po
proizvodstvu pitatel'nykh sred Ministerstva zdravookhraneniya
SSSR (dir. - kandidat biologicheskikh nauk N.A.Likhvar')
(DIPHTHERIA, epidemiol.
cutaneous)

(SKIN, DISEASES, epidemiol.
diphtheria, cutaneous)

SVIRIDENKO, Ye. T., Cand of Med Sci -- (diss) "Diphtheria microbes in skin diseases." Makhachala, 1957, 9 pp (Voronezh State Medical Institute)
200 copies (KL, 35-57, 109)

SVIRIDENKO, Ye. T.

SVIRIDENKO, Ye.T.

Studying specific agglutinins in cutaneous diphtheria patients.
Pediatria no.3:58-59 Mr '57. (MIRA 10:10)

1. Iz Dagestanskogo muchno-issledovatel'skogo instituta po
proizvodstvu pitatel'nykh sred Ministerstva zdravookhraneniya SSSR
(dir. - kandidat biologicheskikh nauk N.A. Likhvar')
(DIPHTHERIA) (AGGLUTININS)

SVIRIDENKO, Ye.T.

Comparative viability of diphtheria bacteria and hemolytic streptococci
on fish and meat-peptone agar. Lab.delo 6 [i.e.4] no.4:49-50 JI-Ag '58
(MIRA 11:9)

1. Iz Dagestanskogo nauchno-issledovatel'skogo instituta po
proizvodstvu pitatel'nykh sred (dir. - kand.biol.nauk N.A. Likhvar').
Makhachkala.

(CORYNBACTERIUM DIPHTHERIAE)

(STREPTOCOCCI)

(BACTERIOLOGY—CULTURES AND CULTURE MEDIA)

SVIRIDENKO, Ye.T.; ALIYEVA, R.O.; BOCHKAREVA, N.N.

Summaries of articles received by the editor. Eradication of a
diphtheria focus. Pediatriia 36 no.2:87 F '59. (MIRA 12:4)

1. Iz Dagestanskogo nauchno-issledovatel'skogo instituta po proiz-
vodstvu pitatel'nykh sred.
(DIPHTHERIA)

SVIRIDENKO, Ye.T.

Comparative evaluation of dry fish agar and of Puchel's medium in
typing diphtheria microbes. Lab.delo 7 no.7:56 Jl '61.
(MIRA 14:6)

1. Dagestan'skiy nauchno-issledovatel'skiy institut pitatel'nykh
sred.

(BACTERIOLOGY—CULTURES AND CULTURE MEDIA)
(CORYNEBACTERIUM DIPHTHERIAE)

L 8833-66 ENT(1)/EWA(j)/EWA(b)-2 JK
ACC NR: AT5027530

SOURCE CODE: UR/0000/63/000/000/0053/0056 36

B+1

AUTHOR: Sviridenko, Ye. T.

ORG: Daghestan Institute of Nutritive Media (Dagestanskiy institut pitatel'nykh sred)

TITLE: Search for new nutritive media for producing diphtheria toxin. Report III. A comparative study of the toxigenicity of PW-8 diphtheria bacilli under conditions of prolonged cultivation in a fish bouillion

SOURCE: Moscow. Nauchno-issledovatel'skiy institut vaktsin i syvorotok. Vaktsiny i syvorotki; materialy po proizvodstvu, no. 1, 1963,
53-56 4455

TOPIC TAGS: infective disease, toxicology, bacteriology, NUTRIOLOGY

ABSTRACT: In an effort to find new nutritive media to take the place of peptone (from pigs' stomachs) and meat bouillions in diphtheria toxin production, bouillions prepared from autolysates of deep sea Caspian herrings (sprats) are being tested. In the present study a series of experiments was conducted over a 13 month period to compare the toxigenicity of PW-8 diphtheria bacilli cultures grown in a herring bouillon with that of cultures grown in Martin's bouillion. The toxin producing capacity of the PW-8 diphtheria bacilli cultures was.

Card 1/2

L 8833-66

ACC NR: AT5027530

determined once every week for the first 3 mos, once every two weeks the following 3 mos, and once every $1\frac{1}{2}$ to $2\frac{1}{2}$ mos for the remaining 7 mos. Findings show that cultivation of PW-8 diphtheria bacilli in a Caspian herring bouillion for 13 mos does not reduce their toxigenicity. During the 13 month period toxin titers of the PW-8 diphtheria bacilli cultures were practically the same for both nutritive media. Thus, bouillions prepared from autolysates of deep sea Caspian herrings are highly satisfactory substitutes for meat bouillions and peptone in diphtheria toxin production. Orig. art. has: 1 table.

SUB CODE: 06/ SUBM DATE: 31Aug63/ ORIG REF: 007/ OTH REF: 000

RVK.
Card 2/2

L 5172-66 EPA(s)-2/EWT(m)/EPF(n)-2/T/EIT(t)/EWP(b) IJP(c) JD/WW/
ACCESSION NR: AT5022450 JG/GS UR/0000/65/000/000/0001/0022

AUTHOR: Subbotin, V. I.; Ushakov, P. A.; Zhukov, A. V.; Talanov,
V. D.; Kudryavtseva, L. K.; Sviridenko, Ye. Ya.; Vasili'yeva, L.

TITLE: Investigation of the temperature distribution in core and
shield elements of BN-350 reactor by means of experimental models

SOURCE: Obninsk. Fiziko-energeticheskiy institut. Doklady, 1968.
Eksperimental'noye issledovaniye na modelyakh pory temperaturey teplovydelyayushchikh elementov aktivnoy zony i ekranov reaktora BN-350, 1-22

TOPIC TAGS: nuclear power reactor, fast reactor, liquid metal cooled reactor

ABSTRACT: The distribution of temperatures in various parts of a 350 Mw fast-neutron sodium-cooled reactor was investigated by means of two special experimental models. The first model consisting of two loops was similar to the core of the BN-reactor while the second model was arranged for investigation of heat transfer in the shielding area. Particular attention was given to the centrally and peripherally located fuel elements that is to the fuel assemblies submitted to different heat transfer conditions. The core primary. Card 1/2

09010417

L 5172-66

ACCESSION NR: AT5022450

loop was cooled by sodium while a sodium-potassium compound was used as coolant for the secondary core loop as well as for fuel elements placed within lateral shields. The core model consisted of 37 tubes of which 34 tubes were provided with special welded fins. The shield model had an assembly of 19 tubes. A detailed description of the experiments was given and the results were analyzed. The irregularities in temperature distribution were graphically presented in 10 figures. It is proposed to resume the research on temperatures by using new models because the evaluation of temperature ranges and gradients on outer peripheral elements was not sufficiently reliable. Introductory information is also given on BN-350 reactor as well as on some heat transfer problems. Orig. art. has: 3 diagrams and 10 graphs.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: NP

NO REF Sov: 000 OTHER: 000

Card 2/2 bnd

-SVIRIDENKO, Yu., inzh.

By using wet method. Sov.shakht. 13 no.1:12-13 Ja '64.
(MIRA 17:3)
1. Vostochnyy nauchno-issledovatel'skiy institut po bezopasnosti
rabit v gornoj promyshlennosti.

43410

S/051/62/013/005/016/017
EO39/E420AUTHORS: Belikova, T.P., Galanin, M.D., Sviridenkov, E.A.TITLE: Kinetic photoconductivity and luminescence of ZnS-Cu
crystal phosphor with pulsed excitation

PERIODICAL: Optika i spektroskopiya, v.13, no.5, 1962, 752-753

TEXT: It is known that a well defined connection exists between kinetic photoconductivity and kinetic luminescence. This work is extended to cover the case of pulsed excitation from a spark. A single crystal of ZnS-Cu, Cl, was grown from the gaseous phase (dimensions $\sim 2 \times 0.3 \times 0.01$ mm) fixed onto a mica sheet and metallized aluminium electrodes applied. The interelectrode region was chosen to be free from cracks and with a width of 0.3 mm. The dark resistance between the electrodes was $> 10^8 \Omega$ and the applied voltage could be varied from 0. to 250 V. On one beam of a QECO-1 (DESO-1) oscillosograph was shown the photocurrent and on the other the output from a photomultiplier measuring the luminescence of the crystal. These curves have a very similar form with a fast initial decay tailing off after about $50 \mu\text{sec}$. With the aid of the following expression derived in a previous

Card 1/3

S/051/62/013/005/016/017
E039/E420

Kinetic photoconductivity ...

paper

$$I = - \frac{dn}{dt} = \beta n N$$

where n and N are the concentration of ionisation centres and electrons in the conduction band, β is the probability of recombination and I is intensity of luminescence; neglecting the effect of the hole processes it is shown that the conductivity $\sigma(t)$ must be proportional to $N(t)$. In addition the change in concentration of the ionisation centres can be obtained by integrating the luminescence decay curves (neglecting quenching) : $n(t) + c = \int I dt$.

Hence it follows that there must be a linear dependence between I/σ and $\int I dt$. This is verified experimentally. The photoconductivity during pulsed excitation is nearly 5 orders higher than the dark conductivity and does not depend on the field strength (up to 7500 V/cm). In contrast the average conductivity under the action of pulsed excitation and also the dark conductivity increases exponentially with voltage beginning at

Card 2/3

Kinetic photoconductivity ...

S/051/62/013/005/016/017
E039/E420

2500 to 3000 V/cm. This is due to an increase in the number of carriers. The dark conductivity up to this voltage remains constant and is equal to $1.3 \times 10^{-7} \Omega^{-1} \text{cm}^{-1}$. There are 2 figures.

[Abstractor's note. Abridged translation.]

SUBMITTED: February 24, 1962

Card 3/3

AUTHOR: Belikova, T. P.; Sviridenkov, E. A.

50

28

B

TITLE: The effect of a focused ruby laser beam on ruby

25,44

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu.
Prilozheniye, v. 1, no. 6, 1965, 37-40

TOPIC TAGS: ruby, ruby laser, solid state laser, stimulated emission

ABSTRACT: An investigation was made of the effect of a ruby laser beam on cube-shaped ruby crystals with 10-millimeter edges placed at the focus of the beam. A

Card 1.2

L 60981-65

APPROVAL NR APPROVAL

2

At low power generation power, the excitation was attributed to two-photon absorption. At higher generation power, the excitation was attributed to one-photon absorption. The excited state was identified as the 3P_1 level, subsequent re-

SUBMITTED: MAY 22

NO REF SOV: 000

OTHER: 002

ATT PRESS: 4062

Card 2/2

L 26065-66 EWT(1)/EWT(m)/EWP(e) IJP(c) AT/WH

ACC NR: AP6015801

SOURCE CODE: UR/0386/66/003/010/0394/0398

AUTHOR: Belikova, T. P.; Sviridenkov, E. A.

ORG: Physics Institute im. P. N. Lebedev, Academy of Sciences SSSR (Fizicheskiy
institut Akademii nauk SSSR)

TITLE: Photoconductivity of ruby when strongly irradiated by a ruby laser

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu.
Prilozheniye, v. 3, no. 10, 1966, 394-398

TOPIC TAGS: ruby optic material, ruby laser, photoconductivity, light absorption,
photon

ABSTRACT: The authors have observed photoconductivity in ruby exposed to strong
light ($\sim 10^{10}$ w/cm²) from a Q-switched ruby laser. The photoconductivity was produced
by drilling holes in a ruby sample for electrodes of 2 mm diameter spaced 2 mm apart,
to which a voltage of 4 kv was applied. The quantity actually measured was not the
photoconductivity directly, but the recharging of the ruby capacitance between the
electrodes, resulting from the appearance and motion of carriers in the interelectrode
space. The difference between this effect and lasing action is explained. Express-
ions are given for the density of the electrons produced per second in the conduc-
tion band and for the lifetime of the electron in the conduction band. The appear-
ance of the electrons in the conduction band is attributed to the many-photon absorp-
tion in the chromium ion and their ionization. It is shown in particular, from an
analysis of the dependence of the absorption coefficient on the light intensity, that

Card 1/2

L 26065-66

ACC NR: AP6015801

two-photon absorption from the excited level is present in this case and increases with increasing light intensity. The authors thank M. D. Galanin for continuous interest. Orig. art. has: 2 figures and 6 formulas. [02]

SUB CODE: 20/ SUBM DATE: 14Mar66/ ORIG REF: 002/ OTH REF: 001/
ATD PRESS: 4252

Card 2/2 CC

L 26255-66 EWT(1)/EWT(m)/EWP(e)/EWP(t) IJP(c) AT/WH/JD
ACC NR: AP6013054 SOURCE CODE: UR/0048/66/030/004/0570/0572

AUTHOR: Belikova, T.P.; Sviridenkov, E.A.

ORG: none

TITLE: Luminescence and photoconductivity of ZnS:Cu and ZnS:Tu crystals under the influence of ruby laser light [Report, Fourteenth Conference on Luminescence held in Riga, 16-23 September 1965]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 4, 1966, 570-572

TOPIC TAGS: luminescence, recombination luminescence, crystal phosphor, zinc sulfide, light absorption, photoconductivity

ABSTRACT: Distinctive blue or green luminescence and photoconductivity associated with two-photon excitation have been observed for several phosphors under stimulation by red ruby laser light flashes. The present work was a continuation of earlier studies of the processes of decay of the luminescence and photoconductivity of ZnS:Cu phosphors. In the earlier work the stimulation was by UV; in the present work the stimulation was by the light flashes from a ruby laser. To minimize surface effects in the photoconductivity measurements the phosphor crystals were held in vacuum, the ruby laser beam was defocused, and the entire crystal except for the interelectrode region was covered with a reflecting non-conducting coating. The experimental data

Card 1/2

L 26255-66

ACC NR: AP6013054

5

for the studied ZnS:Cu and ZnS:Tm crystals are presented in the form of graphics: plots of the initial luminescence amplitude versus the flash intensity photoconductivity versus flash intensity and decay of the photoconductivity with time. For both phosphors the emission increases approximately linearly with the flash intensity; the same thing is true of the conductivity. The rectilinear plots for the two phosphors are not quite parallel and are offset along the flash intensity axis; ZnS:Tm is characterized by higher values of the luminescence amplitude and photoconductivity at equal values of the flash intensity. The photoconductivity decay curves indicate that the conductivity falls off with the time of the short luminescence decay process, which indicates that the photoconductivity is also due to a recombination mechanism. The experimental data are discussed briefly and it is concluded that a ruby laser is a good source for excitation of luminescence by two-phonon absorption. The authors thank L.A.Sysoev and S.A.Fridman for making available the crystals. The authors are grateful to M.D.Galanin for discussions of the results and constant interest in the work. Orig. art. has: 3 figures.

[15]

SUB CODE: 20/ SUBM DATE: 00/ ORIG REF: 007/ OTH REF: 003/
ATD PRESS: 4244

Card 2/2 CC

ACC NR: AP7003539

SOURCE CODE: UR/0336/67/005/001/0029/0032

AUTHOR: Belikova, T. P.; Sviridenkov, E. A.

ORG: Physics Institute im. P. N. Lebedev, Academy of Sciences SSSR (Fizicheskiy institut Akademii nauk SSSR)

TITLE: Frequency doubling of light in ruby

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniya, v. 5, no. 1, 1967, 29-32

TOPIC TAGS: ruby optic material, nonlinear effect, frequency doubling, dipole interaction

ABSTRACT: The authors report observation of emission of wavelength $\lambda = 347$ nm from the region of the focus of a ruby laser in a sample of ruby (which has an inversion center). The observed spectrum consists of two broad bands and a narrow line at double the ruby laser frequency. The radiation was observed both with and without damage to the ruby. The order of magnitude of this emission was estimated from the blackening of the film. 10^{-11} J of light energy is necessary to produce such a blackening in a spot measuring 0.1 mm^2 , and $\sim 10^{-9}$ J is converted into emission with $\lambda = 347$ nm when the incident energy is ~ 1 J. The results are interpreted by estimating the intensities and polarizations for the optical frequency doubling produced by electric dipole and quadrupole and magnetic dipole interaction between the light and the crystal. It is shown that in crystals with an inversion center such as ruby

Card 1/2

UDC: none

ACC NR: AP7003539

double-frequency radiation cannot be produced by electric dipole interaction only. One possible cause of the double-frequency radiation observed in ruby may therefore be magnetic-dipole and electric-quadrupole interaction between the laser light and the corundum lattice. Another cause may be the distortion of the corundum lattice by chromium ions, which may lead to linear polarization proportional to the degree of lattice distortion and to the chromium concentration. Still another possible cause may be the anti-Stokes Raman scattering of the laser light by the chromium ions. In this case account must also be taken of the magnetic-dipole and electric-quadrupole interactions. The lack of data on the values of the matrix elements does not make it possible as yet to estimate the contribution of each of these mechanisms to the production of the double-frequency emission in ruby at the intensity observed in the experiment. The disparity between the observed intensity and the estimates of the possible intensity may be due to the anisotropy of the double-frequency emission resulting from interference effects. The authors thank M. D. Galanin for interest in the work. Orig. art. has: 1 figure and 1 formula.

SUB CODE: 20/ SUBM DATE: 300ct66/ ORIG REF: 003/ OTH REF: 003
ATD PRESS: 5112

Card 2/2

SVIRIDENKOV, F.I.

Machine operators work in three shifts. Transp.stroi. 12 no.10:5
O '62. (MIRA 15:12)

1. Nachal'nik stroitel'no-montazhnogo poyezda No.252 tresta
Kirovsktransstroy.

(Mine railroads)

SVIRIDENKOV, F.I.

Earth-working machinery works in three shifts. Transp.
stroi. 13 no.2:32-34 F '63. (MIRA 16:3)

1. Nachal'nik stroitel'no-montazhnogo poyezda No.252
tresta Kirovsktransstroy.
(Earthwork)

GALANIN, M.D.; LEONTOVICH, A.M.; SVIRIDENKOV, Z.A.; SMORCHKOV, V.N.;
CHIZHIKOVA, Z.A.

Pulsations in the radiation from an optical ruby maser. Opt. i spektr.
14 no.1:165-166 Ja '63. (MIRA 16:5)
(Masers) (Quantum electronics)

BELYYY, Vladimir Alekseyevich; SVIRIDENOK, Anatoliy Ivanovich;
SHCHERBAKOV, Sergey Vasil'yevich; KHOVANOV, I.M., kand.
tekhn. nauk, nauchn. red.

[Plastic gear transmissions] Zubchatye peredachi iz plast-
mass. Minsk, Nauka i tekhnika, 1965. 247 p.
(MIRA 18:6)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001654130007-4

BELYY, V.A., kand.tekhn.nauk; VALIKHOV, V.I.; SVIRIDENOK, A.I.; SHCHERBAKOV, S.V.

Efficiency of the use of polymer gear wheels. Biul.tekh.-tekhn.inform.
Gos.nauch.-issl.inst.nauch.i tekhn.inform. 18 no.5:15-16 My '65.
(MIRA 18:6)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001654130007-4"

BELYY, V.A., kand. tekhn. nauk; SVIRIDENOK, A.I., inzh.; SHCHERBAKOV, S.V., inzh.

Kinds of the fracture of metal-textolite spiral gears. Vest.
mashinostr. 45 no.1:10-12 Ja '65. (MIRA 18:3)

L 4933-66 EWT(d)/EWT(m)/EWP(w)/EPF(c)/EWP(j)/T/EWP(t)/EWP(b) JD/DJ/GS/RM

ACC NR: AT5022682

SOURCE CODE: UR/0000/65/000/000/0298/0301

AUTHORS: Belyy, V. A.; Shcherbakov, S. V.; Sviridenok, A. I.

ORG: Scientific Committee on Friction and Lubrication, AN SSSR (Nauchnyy sovet
po treniyu i smazkam AN SSSR)

TITLE: Investigation of friction and wear of polymer materials applicable to gears

SOURCE: AN SSSR. Nauchnyy sovet po treniyu i smazkam. Teoriya treniya i iznosa
(Theory of friction and wear). Moscow, Izd-vo Nauka, 1965, 298-301

TOPIC TAGS: polymer wear, polymer friction/ B polycaproamide, B caprolon, PT
textolite, DSP G laminate, MI 1M friction machine

ABSTRACT: The results of friction experiments with polymer-metal couples on
contact friction machines of the Amsler type (MI-1M) and of the locked torque
type are described (V. A. Belyy, S. V. Shcherbakov, and Yu. D. Tereshko. Sb.
"Primeneniye plastmass v mashinostroyenii i priborostroyenii." Minsk, 1963).
Gear and roller specimens were prepared from polycaproamide B (VTU 6958) (pressure
casting), caprolon B (VTU P-274-62), textolite PT (GOST 5-52), and laminate DSP-G

Card 1/4

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ACC NR: AT5022682

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(GOST 8697-58) (last three by machining) with a 6-7 class finish of the working surfaces and were matched with steel 45 specimens (HB - 217-225) of 8 class finish. The roller specimens were tested in rolling friction with the input roller driven at 425 rpm. The loads were increased hourly from 20 kg/cm in steps of 10 kg/cm (without lubrication) and 20 kg/cm (with lubrication) during the tests. The results are shown in Fig. 1. The gear specimens were tested in a locked torque configuration at loads of 25-100 kg/cm and speeds of up to 12 m/sec. The relative wear of the polymers is shown in Fig. 2. Surface wear and deterioration were found to be the major cause of failure. The wear can be explained by the fatigue failure theory of I.^uV. Kragel'skiy (Treniye i iznos. Mashgiz, 1962) and the effects of mechano-chemical processes described by N.^uK. Bramboym (Mekhanokhimiya polimerov. Gostekhizdat, 1961), and S.^uP. Ratner (Zakonomernosti istiraniya resin i plastmass. Dokt. diss. M., NIIPlastmass, 1963).

Card 2/4

L 4933-66
ACC NR: AT5022682

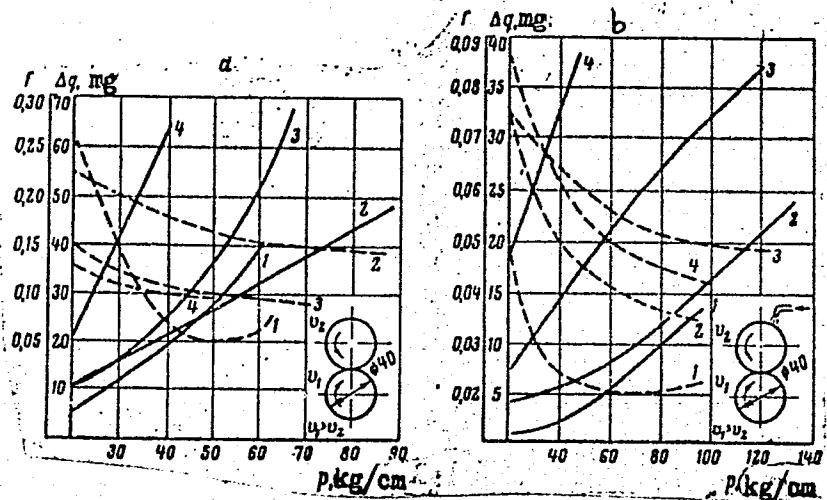


Fig. 1. Weight loss Δq (-) and friction coefficient f (---) vs specific load P for polymer-steel couples (0.18 m/sec):
 a - without lubrication;
 b - with lubrication;
 1 - polycaproamide B;
 2 - caprolon B;
 3 - tentolite PT;
 laminate DSP-G

Card 3/4

L 4933-66

ACC NR: AT5022682

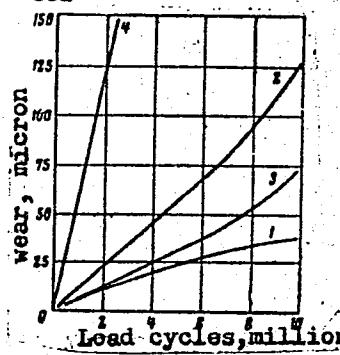


Fig. 2. Polymer wear vs load cycles (lubricated) (1-4 same as Fig. 1)

Orig. art. has: 3 figures and 1 table.

SUB CODE: MT, IE/ SUBM DATE: 18May65/ ORIG REF: 008

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Card 4/4

S/117/60/000/012/011/022
A004/A001

AUTHORS: Belyy, V. A., Starzhinskiy, V. Ye., Sviridenok, A. N.

TITLE: Large-Size Polyamide Bearings With Heat-Conducting Filler

PERIODICAL: Mashinostroitel', 1960, No. 12, pp. 31-32

TEXT: Polyamide slide bearings have been widely used lately in industry because of their high antifriction properties. However, an important deficiency of polyamide bearings, their comparatively low heat resistance and poor heat conduction, have limited their application considerably. The Gomel' Branch of the Laboratoriya prochnosti i dolgovechnosti detaley mashin Instituta mashinovedeniya AN BSSR (Laboratory of Strength and Durability of Machine Parts of the Institute of the Science of Machines at the AS BSSR) has developed a new centrifugal-vacuum method of manufacturing large-size slide bearings and other parts of thermoplastics possessing the shape of bodies of revolution. The new method is characterized by the fact that the parts are shaped in a vacuum from a melt on account of centrifugal forces. The initial material (primary or secondary polyamide) is carefully mixed with a definite quantity of a heat-conducting filler and placed in a cylindrical mold which is then hermetically closed by lids. Then the air is pumped out

Card 1/4

S/117/60/000/012/011/022
A004/A001

Large-Size Polyamide Bearings With Heat-Conducting Filler

from the mold through a valve up to a rarefaction of 80-100 mm Hg. The mold is placed in a heat chamber where the temperature of polyamide melting is permanently maintained. The holding time of the mold in the heat chamber is established experimentally, since it depends on the component dimensions, configuration, heating intensity etc. The mold with the molten polyamide is removed from the heat chamber and placed on a centrifugal machine, which gradually accelerates the rotation of the mold up to the necessary number of revolutions. After a certain holding time the air or water cooling system is put in operation, the rotation is stopped and the ready-made bearing is removed from the mold. According to the author, this new method is the only way to ensure the distribution of the filler over the outer layer of the bearing, while the inner working surface remains free from any extraneous impurities and fully preserves the antifriction properties of the polyamides. As heat-conducting fillers, filings or fine chips of aluminum, bronze, cast iron or other heat-conducting materials can be used. The weight ratio of filler to polyamide is determined by the dimensions of the bearing and its working conditions. The quality of the component depends to a great extent on the selection of the right velocity of rotation, i. e. on the magnitude of centrifugal pressure, developed by the melt, on the mold walls. It was proved by the

Card 2/4

S/117/60/000/012/011/022
A004/A001

Large-Size Polyamide Bearings With Heat-Conducting Filler

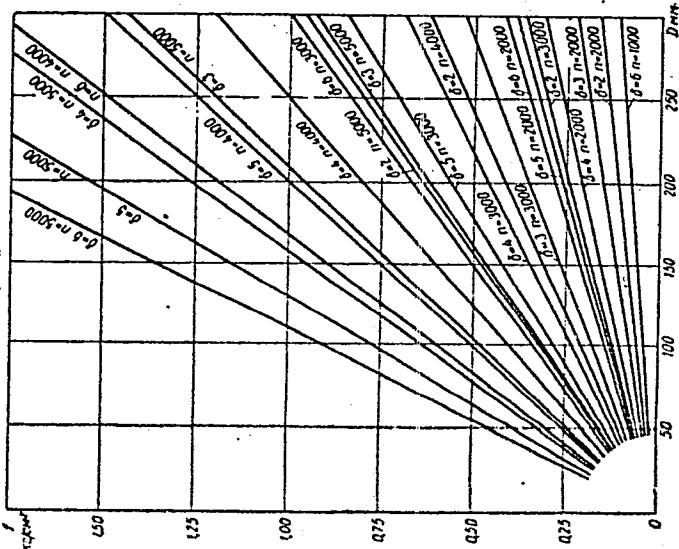
tests that even a specific centrifugal pressure of 1 - 1.5 kg/cm² is sufficient to obtain quality castings. The authors present the following formula which may be used to determine the necessary velocity of rotation of the mold depending on the dimensions of the part being cast:

$$n = 16.5 \cdot 10^3 \sqrt{\frac{R}{\gamma(R^3 - r^3)}},$$

where R and r - outer and inner radii of the part being cast in cm; γ - specific gravity of the material in g/cm³; n - rated velocity of rotation of the mold

Card 3/4

Figure 3:



S/117/60/000/012/011/022
A004/A001

Large-Size Polyamide Bearings With Heat-Conducting Filler

in rpm. The graph in Figure 3 shows the graphical dependence of casting specific pressure f upon outer diameter D and thickness ζ of the part being cast and number of revolutions n of the mold. There are 3 figures.

Card 4/4.

BELYY, V.A.; SVIRIDENOK, A.I.; DERVOYED, N.A.; SHCHERBAKOV, S.V.

Wear of gears made of polyamides studied by the method of dyeing.
Plast. massy no.8:67-68 '63. (MIRA 16:8)

(Polyamides—Testing) (Dyes and dyeing)

BLLYY, V.A.; SVIRIDENOK, A.I.

Equal strength of a metal-polymer gear transmission. Dokl.
AN BSSR 8 no. 1:21-23 Ja '64. (MIRA 17:5)

1. Laboratoriya mekhaniki polimerov Gomel'skogo otdeleniya
Instituta matematiki i vychislitel'noy tekhniki AN BSSR.
Predstavлено академиком AN BSSR B.V.Yarofeyevym.

ACCESSION NR: AT4033628

S/0000/63/000/000/0119/0138

AUTHOR: Netushil, A. V.; Kushelev, Yu. N.; Uskov, V. G.; Budenny*y, A. P.;
Svirido, A. P.

TITLE: Automatic device for checking the current achievement of students

SOURCE: Programmirovannoye obucheniye i kiberneticheskkiye obuchayushchiye mashiny*
(Programmed instruction and cybernetic teaching machines); nauchno-tekhn. sb. statey.
Moscow, Izd-vo "Sovetskoye radio" 1963, 119-138

TOPIC TAGS: teaching machine, programmed instruction, relay teaching machine,
electronic teaching machine, language teaching

ABSTRACT: The article describes the experience acquired in the development of teaching
machines of the relay and electronic type in the Moskovskiy energeticheskiy institut
(Moscow Power Institute). The authors distinguish between two functions in the teaching
process: 1) the planning of the teaching schedule; and 2) the carrying out of what has
already been planned. It is pointed out that the accomplishment of the second of these
functions may be successfully entrusted to specialized teaching machines. The following

Card 1/5